



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/055,844	01/23/2002	Takeshi Kai	KPO-108-A	7883

21828 7590 04/28/2005

CARRIER BLACKMAN AND ASSOCIATES
24101 NOVI ROAD
SUITE 100
NOVI, MI 48375

EXAMINER

CULBRETH, ERIC D

ART UNIT PAPER NUMBER

3616

DATE MAILED: 04/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/055,844

Applicant(s)

KAI ET AL.

Examiner

Eric D Culbreth

Art Unit

3616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-12 and 20-24 is/are allowed.
- 6) ☒ Claim(s) 13-19 and 25-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 February 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 13-19 and 25-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 13 and claim 25, “high speed” is indefinite (all airbags are designed to deploy in milliseconds; what defines “high speed”?).

In claim 15, there is no clear antecedent basis for “said partitions”, as claim 15 depends from claim 13, and claim 13 recites at least one partition (claim 14 recites more than one partition).

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Claims 13-16, 19 and 25-26 as best understood are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent 10-175497 in view of Japanese Patent 10-338097 (both of record and cited by applicant).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Japanese ‘497, who teaches an acceleration sensor generating a signal when lateral acceleration is detected (page 3, paragraph [0020] and page 5, paragraph [0032] of the

Art Unit: 3616

English translation submitted with the reference) and inflator 21 generating gas, in addition to partitions 40 and an airbag that would initially be folded in Figure 3, to include the bag expanding with the gas substantially in parallel to a linear expansion direction as taught by Japanese '097's Figure 18 (i.e., the bag expands upwardly in a linear direction) in order to deploy the bag from an alternative location (Japanese '097 teaches that as an alternative to an angled bag in Drawing 3, which is similar to Japanese '497's angled bag, and the bag may deploy upwardly in a linear fashion to protect the same areas of the occupant in a side collision)(claims 13 and 25). Regarding the functional limitations added to claims 13 and 25, partition(s) 40 determine the shape of the air bag during an expansion process (by limiting how far laterally the sides can move away from each other), thereby facilitating high speed expansion of the airbag to a final shape (as functionally recited, by keeping the bag from expanding too far laterally, the partitions facilitate the bag expanding faster in the expansion direction).

As seen in Figure 7 of Japanese '497, there are multiple circular partitions 40 in a limb portion (where the arm would be by Drawing 1), and as seen in Drawing 5, the partitions 40 are formed by sewing portions of two side panels together (claims 14-16 and 26), and as noted above the partitions (formed by the sewn together predetermined portions) determine an expansion direction of the airbag that is opposed to where gas enters the airbag in the combination (claim 19).

5. Claims 17-18 and 27-29 as best understood are rejected under 35 U.S.C. 103(a) as being unpatentable over Sunabashiri et al (US006561539B1, newly cited) in view of Japanese '497 and Japanese .

Sunabashiri et al discloses partitions 6, 8 that are substantially linear, shaped differently from each other (one is shorter than the other), and are disposed non-symmetrically within the bag. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sunabashiri et al to include the bag made of two panels and the partitions made by sewing predetermined portions of the bag together as taught by Japanese '497 in order to conventionally form the bag with two side panels and eliminate parts and material by making the partitions with sewn together side portions instead of separate cloth strips and to include the bag expanding in a linear expansion direction as taught by Japanese '097 in order to expand the bag from a different location.

Allowable Subject Matter

6. Claims 1-12 and 20-24 are allowed.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric D Culbreth whose telephone number is 571/272-6668. The examiner can normally be reached on Monday-Thursday, 9:30-7:00 alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on 571/272-6669. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Eric D Culbreth
Primary Examiner
Art Unit 3616



ec